

In the Claims

Please cancel Claims 29, 30, 39, 40, 49, 50, 59, 60, 69, 70, 79 and 80.

Please amend Claims 20, 24, 31, 34, 41, 44, 51, 54, 61, 64, 71 and 74. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - iv).

D<sup>1</sup>

20. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. mutans* glucosyltransferase-B which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 562, aspartate 567, histidine 561, tryptophan 491, glutamate 489, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-B protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-B protein.

D<sup>2</sup>

24. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. mutans* glucosyltransferase-B which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 562, aspartate 567, histidine 561, tryptophan 491, glutamate 489, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-B protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-B protein.

D<sup>3</sup>

31. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. mutans* glucosyltransferase-C which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 586, aspartate 591, histidine

585, tryptophan 517, glutamate 515, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-C protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-C protein.

- D4
34. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. mutans* glucosyltransferase-C which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 586, aspartate 591, histidine 585, tryptophan 517, glutamate 515 and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-C protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-C protein.

- D5
41. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. mutans* glucosyltransferase-D which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of tyrosine 587, aspartate 582, histidine 581, tryptophan 505, glutamate 503 and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-D protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-D protein.

- D6
44. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. mutans* glucosyltransferase-D which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of tyrosine 587, aspartate 582, histidine 581, tryptophan 505, glutamate 503 and combinations thereof, wherein said amino acids are

numbered in accordance with the amino acid numbering of the *S. mutans* glucosyltransferase-D protein and wherein said immunogenic composition does not comprise intact *S. mutans* glucosyltransferase-D protein.

- D<sup>7</sup>
51. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. downei* glucosyltransferase-S which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of tyrosine 550, aspartate 545, histidine 544, tryptophan 478, glutamate 476 and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. downei* glucosyltransferase-S protein and wherein said immunogenic composition does not comprise intact *S. downei* glucosyltransferase-S protein.

- D<sup>8</sup>
54. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. downei* glucosyltransferase-S which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of tyrosine 550, aspartate 545, histidine 544, tryptophan 478, glutamate 476, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. downei* glucosyltransferase-S protein and wherein said immunogenic composition does not comprise intact *S. downei* glucosyltransferase-S protein.

- D<sup>9</sup>
61. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. downei* glucosyltransferase-I which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 562, aspartate 567, histidine 561, tryptophan 493, glutamate 491 and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. downei*

~~glucosyltransferase-I protein and wherein said immunogenic composition does not comprise intact *S. downei* glucosyltransferase-I protein.~~

- D<sup>10</sup>
64. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. downei* glucosyltransferase-I which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 562, aspartate 567, histidine 561, tryptophan 493, glutamate 491, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. downei* glucosyltransferase-I protein and wherein said immunogenic composition does not comprise intact *S. downei* glucosyltransferase-I protein.

- D<sup>11</sup>
71. (Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. sobrinus* glucosyltransferase-2 which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 561, aspartate 556, histidine 555, tryptophan 487, glutamate 485 and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. sobrinus* glucosyltransferase-2 protein and wherein said immunogenic composition does not comprise intact *S. sobrinus* glucosyltransferase-2 protein.

- D<sup>12</sup>
74. (Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. sobrinus* glucosyltransferase-2 which is of sufficient length to raise an immune response in a mammal to whom it is administered comprising an amino acid selected from the group consisting of aspartate 561, aspartate 556, histidine 555, tryptophan 487, glutamate 485, and combinations thereof, wherein said amino acids are numbered in accordance with the amino acid numbering of the *S. sobrinus*